



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,084	08/26/2003	Chih-Hsien Chou		4923

25859 7590 02/23/2004
WEI TE CHUNG
FOXCONN INTERNATIONAL, INC.
1650 MEMOREX DRIVE
SANTA CLARA, CA 95050

EXAMINER

MAYO III, WILLIAM H

ART UNIT PAPER NUMBER

2831

DATE MAILED: 02/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/649,084

Applicant(s)

CHOU, CHIH-HSIEN

Examiner

William H. Mayo III

Art Unit

2831

-- **Th MAILING DATE** f this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for provisional priority under 35 U.S.C. 119(e). The provisional Application No. 60/406,135, filed on August 26, 2002.

Drawings

2. The drawings are objected to because Figures 3-5 and 7 lacks the proper cross-hatching which indicates the type of materials, which may be in an invention. Specifically, the cross hatching to indicate the insulative and conductor materials is improper. The applicant should refer to MPEP Section 608.02 for the proper cross-hatching of materials. Correction is required.
3. Figures 1-2B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The abstract of the disclosure is objected to because in line 4, it contains the terms "while have opposite twist directions", which is improper grammar. The applicant should change the terms to state --while having opposite twist directions--. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morimoto (Pat Num 6,355,876) in view of Donner et al (Pat Num 6,452,094, herein referred to as Donner). Morimoto discloses a communications cable (Fig 2) which reduces voice leakage (i.e. cross talk) and eases the task of cable end conditioning (Col 2, lines 7-10). Specifically, with respect to claim 1, Morimoto discloses a cable (Fig 2) that includes a plurality of twisted pairs of conductors (1-4) in a dense matrix-like form (Fig 2) defining thereof horizontal rows (denoted as A-C) and oblique columns (denoted as D-G) with each other in a rectangular coordinate system (as defined by A-C), wherein the twisted pairs (1) in the same row (A) have the same twist direction and wherein for each row (A-C) there is a ninety degrees phase shift between every adjacent two pairs (see 1, 3, & 4) and for each column (see E & G) there is a non-ninety degrees phase shift between every adjacent two pairs (see 1 & 4).

However, Morimoto doesn't specifically disclose all of the columns having a non ninety degree phase shift, nor the two adjacent pairs having opposite twist directions (claim 1), nor the cable defines a hexagonal form (claim 2).

Donner teaches a communications cable (Figs 1-2B) having relatively low cross talk at high bit rates at relatively long distances (Col 1, lines 5-8). Specifically, Donner discloses a cable (Fig 2a) comprising four plurality of twisted pairs (19, 21, 22, & 23) in which two pairs (19 & 22) have a right-hand twist and the other two pairs (21 & 23) have a left-hand twist (Col 4, lines 1-15).

With respect to claim 1, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the twisted pair conductors of Murimoto to comprise the right and left alternative twist configuration as taught by Donner because Donner teaches that such a configuration provides a communications cable having relatively low cross talk at high bit rates at relatively long distances (Col 1, lines 5-8).

With respect to claims 1-2, it would have been obvious to one having ordinary skill in the art of cables at the time the invention was made to modify the all of the columns having a non ninety degree phase shift and the cable having a hexagonal form since it has been held that a change in form cannot sustain patentability where involved is only extended application of obvious attributes from a prior art. *In re Span-Deck Inc. vs. Fab-Con Inc.* (CA 8, 1982) 215 USPQ 835.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They are Paquin (Pat Num 4,413,469), Walling et al (Pat Num 5,424,491), Brorein et al (Pat Num 6,254,924), Ruthledge (Pat Num 6,323,427), Kenny

Art Unit: 2831

et al (Pat Num 6,153,826), Brorein et al (Pat Num 5,767,441), Baker et al (Pat Num 5,834,697), Chou et al (Pat Num 6,348,651), Friesen et al (Pat Num 4,873,393), Wessels et al (Pat Num 5,814,768), and Cronkite et al (Pat Num 4,381,426), all of which disclose communications cable having various twist lengths of conductors.

Communication

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Mayo III whose telephone number is (703) 306-9061. The examiner can normally be reached on M-F 8:30am-6:00 pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-3682. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



WHM III
January 24, 2004